



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.   | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------|------------------|
| 10/749,583   | 12/31/2003  | Daryl Carvis Cromer  | RPS920030220US1(4036) | 2709             |
| 45670 7590 08/14/2009<br>IBM CORPORATION (RTP)<br>C/O SCHUBERT OSTERRIEDER & NICKELSON PLLC<br>6013 CANNON MOUNTAIN DRIVE, S14<br>AUSTIN, TX 78749 |             |                      |                       |                  |
| EXAMINER   |             |                      |                       |                  |
| PATIL, NIRAV B   |             |                      |                       |                  |
| ART UNIT   |             | PAPER NUMBER         |                       |                  |
| 2435   |             |                      |                       |                  |
| MAIL DATE  |             | DELIVERY MODE        |                       |                  |
| 08/14/2009   |             | PAPER                |                       |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



### Office Action Summary

**Application No.**

10/749,583

**Applicant(s)**

CROMER ET AL.

**Examiner**

NIRAV PATEL

**Art Unit**

2435

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 12-18, 38-41 and 48-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12-18, 38-41, 48-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



### DETAILED ACTION

1. Applicant's amendment filed on June 05, 2009 has been entered. Claims 1-7, 12-18, 38-41, 48-50 are pending. Claims 1, 13, 15 are amended and Claims 48-50 are newly added by the applicant.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 12, 15-18, 38, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US Patent No. 7,093,124) and in view of Dayan et al. (US Pub. No. 2002/0188837) and in view of Rothman et al (US Pub. No. 2004/0267926).

As per claim 1, Girard teaches:

selecting the bootable image on the remote client to boot the remote client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client [Fig. 1, col. 7 lines 1-19, Fig. 4, col. 7 lines 35-48, Fig. 5, 6]; generating a wake-on-LAN packet and transmitting the wake-on-LAN packet to the remote client to



wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image [Fig. 6, col. 8 lines 10-43].

Girard teaches the wake-on-LAN packet to wake up and/or boot the remote client. Girard doesn't expressively mention a partition identification information.

Dayan teaches generating a wake-on-LAN packet with an identification/address information [Fig. 4, paragraph 0008, 0010, 0034, 0035]; and transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image [Fig. 4, paragraph 0008, 0010, 0034, 0035].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Dayan with Girard to include directive information into the wake-on-LAN packet (magic packet), since one would have been motivated to boot to a designated partition in a nonvolatile storage unit without requiring a local operator [Dayan, paragraph 0007].

Dayan teaches generating a wake-on-LAN packet with an identification/address information. Girard and Dayan do not expressively mention a partition identification information.

Further, Rothman teaches a packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client [paragraph 0037, 0033, Fig. 1, 4].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Rothman with Girard and Dayan to access the



content of the remote computer for performing the requested tasks to control the remote system without depend on the vendor of the remote computer [Rothman, paragraph 0004 lines 13-16, 0012].

As per claim 2, the rejection of claim 1 is incorporated and Dayan teaches:

selecting the bootable image from a drive, the drive being internal to the remote client [Fig. 4, paragraph 0034, 0035].

As per claim 3, the rejection of claim 1 is incorporated and Dayan teaches:

selecting the bootable image from a secure resource of the remote client [Fig. 4, paragraph 0034, 0035].

As per claim 4, the rejection of claim 1 is incorporated and Dayan teaches:

resource comprises selecting the bootable image from a hidden partition associated with the remote client [Fig. 4, paragraph 0034, 0035].

As per claim 5, the rejection of claim 1 is incorporated and Dayan teaches: the information to be associated with the bootable image by the remote client [Fig. 4, paragraph 0034, 0035].

Rothman teaches: selecting logical address for the bootable image (content of the memory), the logical address to be associated with the bootable image (content of the memory) by the remote client [Fig. 1, 4, paragraph 0037, 0035].



As per claim 6, the rejection of claim 1 is incorporated and Dayan teaches:  
extending the wake-on-LAN packet with the partition identification [paragraph 0008, 0010].

As per claim 7, the rejection of claim 1 is incorporated and Dayan teaches:  
generating a parameter to associate with the partition identification to provide a post-boot instruction to the remote client [Fig. 4, paragraph 0008, 0010, 0034, 0035].

As per claim 12, the rejection of claim 1 is incorporated and Girard teaches:  
transmitting comprises broadcasting the wake-on-LAN packet to the remote client and at least one other remote client [Fig. 1].

As per claim 15, it encompasses limitations that are similar to those of claim 1. Thus, it is rejected with the same rationale applied against claim 1 above.

As per claim 16, the rejection of claim 15 is incorporated and it encompasses limitations that are similar to those of claim 3. Thus, it is rejected with the same rationale applied against claim 3 above.



As per claim 17, the rejection of claim 15 is incorporated and it encompasses limitations that are similar to those of claim 6. Thus, it is rejected with the same rationale applied against claim 6 above.

As per claim 18, the rejection of claim 15 is incorporated and Girard teaches: broadcasting the wake-on-LAN packet to the remote client and at least one other remote client [Fig. 1].

As per claim 38, the rejection of claim 1 is incorporated and Girard teaches: downloading the software application from the maintenance server to the remote client subject to a determination of the trustworthiness of the maintenance server by the remote client [Fig. 1, col. 7 lines 3-19, Fig. 4, col. 7 lines 35-48, Fig. 5, 6].

As per claim 39, the rejection of claim 1 is incorporated and Girard teaches: passing a parameter to the bootable image to initiate the software application on the maintenance server subject to a determination of the trustworthiness of the maintenance server by the remote client [Fig. 1, col. 7 lines 3-19, Fig. 4, col. 7 lines 35-48, Fig. 5, 6].

As per claim 41, the rejection of claim 15 is incorporated and it encompasses limitations that are similar to those of claim 38. Thus, it is rejected with the same rationale applied against claim 38 above.



3. Claims 13, 14 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US Patent No. 7,093,124) in view of Dayan et al. (US Pub. No. 2002/0188837) in view of Rothman et al (US Pub. No. 2004/0267926) and in view of Kim (US Pub. No. 2004/0163008).

As per claim 13, Girard teaches:

a server computer system in communication with at least one client computer system, the server computer system comprises a processor capable to selecting the bootable image on the remote client to boot the remote client, the bootable image comprising software to determine the trustworthiness of a software application on a maintenance server prior to executing the software application, for the remote client [Fig. 1, col. 7 lines 1-19, Fig. 4, col. 7 lines 35-48, Fig. 5, 6]; wherein the server computer system is capable of generating a wake-on-LAN packet and wherein the server computer system is capable of transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot application of the remote client to boot via the bootable image [Fig. 6, col. 8 lines 10-43].

Girard teaches the wake-on-LAN packet to wake up and/or boot the remote client. Girard doesn't expressly mention a partition identification information.

Dayan teaches generating a wake-on-LAN packet with an identification/address information [Fig. 4, paragraph 0008, 0010, 0034, 0035]; and transmitting the wake-on-LAN packet to the remote client to wake up the remote client and to instruct a pre-boot



application of the remote client to boot via the bootable image [Fig. 4, paragraph 0008, 0010, 0034, 0035].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Dayan with Girard to include directive information into the wake-on-LAN packet (magic packet), since one would have been motivated to boot to a designated partition in a nonvolatile storage unit without requiring a local operator [Dayan, paragraph 0007].

Dayan teaches generating a wake-on-LAN packet with an identification/address information. Girard and Dayan do not expressively mention a partition identification information.

Further, Rothman teaches a packet with a partition identification, the partition identification comprising an address of a location of the bootable image, to identify the location within a local resource of the remote client [paragraph 0037, 0033, Fig. 1, 4].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Rothman with Girard and Dayan to access the content of the remote computer for performing the requested tasks to control the remote system without depend on the vendor of the remote computer [Rothman, paragraph 0004 lines 13-16, 0012].

Girard, Dayan and Rothman do not expressively mention a database for one or more clients.



Further, in an analogous art, Kim teaches: a database, the database comprising an indication of one or more clients and the status of their wake-on-LAN functionality [Fig. 2, 6, paragraph 0043].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Kim with Girard, Dayan and Rothman, since one would have been motivated to manage end user application software and services available on computer network from a central location and reduce the overall cost of the computers on the network [Kim, paragraph 0010, 0012].

As per claim 14, the rejection of claim 13 is incorporated and Girard teaches: an Ethernet network coupled to the server computer system and the at least one client computer system [Fig. 1].

As per claim 40, the rejection of claim 13 is incorporated and Girard teaches: wherein the server computer system is capable of downloading the software application by the maintenance server to the remote client subject to a determination of the trustworthiness of the maintenance server by the remote client [Fig. 1, col. 7 lines 3-19, Fig. 4, col. 7 lines 35-48, Fig. 5, 6].

4. Claims 48, 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US Patent No. 7,093,124) in view of Dayan et al. (US Pub. No. 2002/0188837)



in view of Rothman et al (US Pub. No. 2004/0267926) and in view of Connery et al. (US Patent No. 6,606,709).

As per claim 48, the rejection of claim 1 is incorporated and Girard and Dayan teach the server computer system is capable of generating a wake-on-LAN packet as above.

Girard, Dayan and Rothman do not expressly mention a *parameter* for the bootable image.

However, Connery teaches the server computer system is capable of generating a wake-on-LAN packet with a parameter for the bootable image, the parameter to instruct the bootable image to initiate the software application [Figs. 1, 4, 5, 6, col. 7 lines 1-43, col. 12 lines 25-67].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Connery with Girard, Dayan and Rothman to include parameter for bootable image, since one would have been motivated to provide greater flexibility and functionality, without limiting the security, at low costs [Connery, col. 1 lines 65-67, col. 2 lines 1-3].

As per claim 50, the rejection of claim 15 is incorporated and it encompasses limitations that are similar to those of claim 48. Thus, it is rejected with the same rationale applied against claim 48 above.



5. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Girard (US Patent No. 7,093,124) in view of Dayan et al. (US Pub. No. 2002/0188837) in view of Rothman et al (US Pub. No. 2004/0267926) and in view of Kim (US Pub. No. 2004/0163008) and in view of Connery et al. (US Patent No. 6,606,709).

As per claim 49, the rejection of claim 13 is incorporated and Girard and Dayan teach the server computer system is capable of generating a wake-on-LAN packet as above. Girard, Dayan, Rothman and Kim do not expressly mention a parameter for the bootable image.

However, Connery teaches the server computer system is capable of generating a wake-on-LAN packet with a parameter for the bootable image, the parameter to instruct the bootable image to initiate the software application [Figs. 1, 4, 5, 6, col. 7 lines 1-43, col. 12 lines 25-67].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Connery with Girard, Dayan, Rothman and Kim to include parameter for bootable image, since one would have been motivated to provide greater flexibility and functionality, without limiting the security, at low costs [Connery, col. 1 lines 65-67, col. 2 lines 1-3].



### **Response to Amendment**

6. Applicant has amended claims 1, 13 and 15 and added new claims 48-50. Newly added claims are rejected based on newly found reference Connery et al. is used in combination with various previously cited prior art.

Regarding to applicant argument to claims 1, 13, 15, Examiner maintains since Girard teaches a computer system 120 which receives wake-up packets from the management computer 110 as shown in Fig. 6. The boot code is executed at the computer system 120 by passing the control to the operating system, once the code being downloaded from the management computer is authenticated. Further, Dayan's invention relates to booting to a designated partition in a non-volatile storage unit to conduct recovery/maintenance operations. Dayan teaches a magic packet which includes address information and directive information for indicating to the BIOS to boot to hidden partition. Therefore, Dayan teaches a wake-on-LAN packet that provides location of bootable image to instruct the pre-boot application of the remote client to boot via the bootable image. Further, Rothman's invention relates to accessing the firmware of a remote computer system, wherein the remote computer receives the packet. The request packet contains one or more task for the remote computer to perform. The task includes instructing the firmware to execute code stored on the remote computer. Further, the request packet contains the memory address to access the content of the remote computer. Therefore, Rothman teaches the packet that contains the address information to access the content of the memory within the local



resource of the remote computer system. In this case, the combination of Girard, Dayan and Rothman teaches the claim limitation "a wake-on-LAN packet with partition identification that comprises an address of a location of the bootable image with a local resource of the remote computer system". Furthermore, the examiner recognizes that obviousness can also be established by combining or modifying the teaching of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F. 2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ 2<sup>nd</sup> 1941 (Fed. Cir 1992). The combination is sufficient as one of ordinary skill in the art at the time the invention was made, since one would have been motivated to boot to a designated partition in a nonvolatile storage unit without requiring a local operator [Dayan, paragraph 0007] and to access the content of the remote computer for performing the requested tasks to control the remote system without depend on the vendor of the remote computer [Rothman, paragraph 0004 lines 13-16, 0012].

Regarding to newly added claims 48-50, newly found reference Connery et al. is used in combination with various previously cited prior art. Connery teaches the parameter field for boot command in the wake-on-LAN packet format as shown in Fig. 5. Therefore, applicant's arguments are moot in view of the new ground(s) of rejection.



**Conclusion**

7. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nirav Patel whose telephone number is 571-272-5936. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax and phone numbers for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

/Kimyen Vu/

Supervisory Patent Examiner, Art Unit 2435